Memorandum

To: File

From: John D. Jenks, Environmental Engineer

Through: Rusty Ruby R 9/27/04

Date: 9/27/2004

Re: Response to Comments received on Sevier Power Company (N2529-001)

Beginning on March 3, 2004, a public comment period was held to solicit comments regarding Sevier Power Company's (SPC) Power Plant Intent to Approve (ITA). The SPC project is a 270-MW coal fired circulating fluidized bed (CFB) utility boiler, located near the town of Sigurd, Utah. At the source and public's request a public hearing was held on March 18, 2004. Numerous comments were received, both during the comment period and at the public hearing.

On March 24, 2004, in accordance with public request, the comment period was extended by ten (10) days. With this second notice, a correction was also made to the listed emissions of SO_2, to correct a typographical error.

On June 2, 2004, an additional 30-day comment period was started, to address shortcomings in the previous public notices of March 3rd and March 18th. A second typographical error, regarding the emissions of mercury was also corrected.

All comments received during the two public comment periods and the public hearing, are listed here, with the original comments being included as an attachment. Following each comment is the Utah Division of Air Quality's (UDAQ) response, along with any action taken by the Division in regards to the final Approval Order (AO).

Some notes on the comments. NEVCO Energy Company, LLC (NEVCO) is the parent company of Sevier Power Company. Much of the information submitted by SPC originally came under the NEVCO letterhead. Commenters often blurred the line between the two legal entities, so the terms 'NEVCO' and 'SPC' are used interchangeably throughout their comments. Whenever possible, UDAQ refers to the source as SPC, and only uses NEVCO when referencing the meteorological data collected in preparation to submitting SPC's Notice of Intent (NOI) – which serves as the air quality permit application within the State of Utah.

Quoted items are taken verbatim from the original comment submission. If the comment was unclear, UDAQ attempted to explain the comment as understood by the Division. Unless otherwise stated, individual comments were made by one individual or group entity (as was the case for comments originating from the consortium of environmental groups).

1. 53 individuals submitted the following comment:

> "Please do not approve the permit to NEVCO to build a coal fired power plant in Sevier County. We live here because we love the clean air that is integral to our quality of life. Please do not let NEVCO turn our county into a repository for heavy industry and all the negative impacts that go along with such a devastating violation to our home.
>
> Please remember that happy children able to laugh without choking and coughing and struggling to breathe, is all the justification we need to deny this permit. Please do what is right and not what is expedient.
>
> Thank you."

UDAQ response:

The comment was noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

2. Two individuals amended Comment #1 to request that the clean air in the Sevier Valley be kept clean for later years.

UDAQ response:

The comment was noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

3. 133 individuals signed a petition that read as follows:

   > "As residents of the Town of Venice and surrounding areas, we are opposed to the construction of a Power Plant that is being proposed in Sevier County"

UDAQ response:

The comment was noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

4. Six individuals submitted photocopies of newspaper articles typically of the "letters to the editor" format. These newspaper articles either addressed the need to look at alternative production processes such as IGCC or else were expressions of simple opposition to the proposed power plant.

UDAQ response:

The comments on IGCC are addressed below in UDAQ's response to Comment #84. The other comments were noted. As no technical issues were raised with respect to the Intent to Approve by these additional comments, no changes were made to the Approval Order.

5. Two individuals submitted photographs of the Sevier Valley demonstrating a possible inversion period and showing how pollutants from other sources in the area become trapped by the inversion.

UDAQ response:

The comments (photos) were noted. Periods of inversions were demonstrated within the one year of meteorological data collected by the source in partial requirement for the Prevention of Significant Deterioration modeling required prior to issuance of an Approval Order. Further information on this can be seen in UDAQ's response to Comment #8.

6. Two written comments were received expressing general approval of the proposed project.

UDAQ response:

The comments were noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

7. 30 individuals submitted comments of general opposition. These comments were typically concerned with scenic quality or clean air in a general sense. Many of these comments also addressed water use, land use or truck traffic in areas not controlled through the proposed Approval Order. Finally these general comments also included mention of non-specific health concerns.

UDAQ response:

The comments were noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order. UDAQ has no ability to regulate land or water use, as these are the areas of concern of the Division of Water Quality, Division of Drinking Water, Division of Solid and Hazardous Waste, the Department of Natural Resources and local planning and zoning commissions. Scenic issues are addressed in UDAQ's response to Comment #26. General health concerns are covered in UDAQ's response to Comment #20.

8. Six individuals submitted comments that the meteorological data set collected by Sevier Power Company for use in the modeling required under prior to the issuance of a Prevention of Significant Deterioration Approval Order was not representative of the true meteorology of the area.

UDAQ response:

Utah air quality rule R307-410(2)(2) states that all air quality modeling be conducted following EPA's – Guideline on Air Quality Models. The guidelines require Prevention of Significant Deterioration (PSD) applicants to conduct one year of on-site meteorological data for use in their air quality analysis. The applicant and their consultant met with UDAQ staff on several occasions prior to conducting their on-site monitoring, in order to devise a monitoring protocol consistent with PSD data collection quality control and quality assurance requirements. The location for the monitor site and the tower's height were chosen based on their ability to measure meteorological data consistent with the proposed plant site, and at elevations similar to those in which the pollutants would be released and transported downwind. The monitoring site was located on the eastern side of the Sevier Valley approximately 1 mile south of the proposed plant site. This site was approved by a

UDAQ staff meteorologist prior to the commencement of monitoring. Wind data was collected at multiple levels. Wind speed and direction data collected at 100 meters above ground was used to simulate transport of pollutants from the main stack. Additional wind data was collected at 10 meters above ground to simulate transport of pollutants released near the surface. Periodic audits were conducted on all monitoring equipment during the data collection period to ensure the accuracy of all measurements. The UDAQ has reviewed the data for quality control and quality assurance and has found it to be acceptable. The UDAQ feels that this data set is representative of meteorological conditions under which pollutants from the proposed plant would be transported, and that the data collection meets all regulatory requirements.

9. One commenter stated,

> "Only one year of data collected on site and for limited meteorological information. Only one year's worth of data was used for all the locally collected data. Since there was extremely little locally collected data, which in itself is inappropriate, this local data becomes much more important. As you are aware, we are in an extended drought period. During droughts, winds and temperatures often increase and since both wind and temperature are factors in the modeling more than one year's data should be used. Other sources of weather data should be consulted to ascertain whether of not there have been unusual weather patterns that could affect the modeling. Until these other sources have been thoroughly explored no permit should be issued."

Another commenter also gave a similar comment:

> "Only One Year of Meteorology Data Was Modeled in the Class I Area Analysis: According to UDAQ's December 2003 New Source Plan Review, only one year of meteorological data was used in the "far-field" Class I area analyses for the SPC Project. However, EPA's Guidelines on Air Quality Models in 40 C.F.R. Part 51, Appendix W, require more than one year of meteorology be used in the modeling, especially for long range transport assessments. On April 15, 2003, EPA promulgated revisions to the Guidelines on Air Quality Models that require at least three years of mesoscale meteorological data to be modeled for long range transport situations. This was a relaxation from the previous version of the Guidelines which required 5 years of meteorological data be used. As EPA states in the Guidelines, a longer length of meteorological record is necessary to ensure that the variability of model estimates due to meteorological data is sufficiently reduced. When NEVCO submitted their revised PSD permit application in September 2003, it should have included a modeling analysis of at least three years of mesoscale meteorological data in its far-field modeling analysis. NEVCO must be required to model at least two more years of mesoscale meteorology data in its Class I area analysis. Until then, NEVCO's Class I increment and air quality related values analysis cannot be considered complete or conclusive."

UDAQ response:

On April 15, 2003, the EPA published a Federal Register notice adopting changes to the Guideline on Air Quality Models. This notice included the use of the CALPUFF modeling system as the preferred EPA model for simulating long-range transport of pollutants, and to change the previous requirement for one year of mesoscale meteorological (MM5) data to simulate long-range transport to three years of data. On May 13, 2003, EPA published a correction to this notice, making the effective data for the three-year meteorological data requirement April 15, 2004. The NEVCO modeling was considered complete before the April 15, 2004 deadline passed. The UDAQ feels NEVCO met the legal requirements for MM5 meteorological data usage at the time the modeling was deemed complete.

10. As a related issue, five individuals submitted comments that the use of upper air data from the Salt Lake City Airport is not representative of local meteorological conditions and that such data should have been collected locally.

UDAQ response:

The UDAQ reviewed the three closest National Weather Service sites, which are collecting twice-daily profiles of the upper atmosphere (Salt Lake City, Utah, Grand Junction, Colorado, and Desert Rock, Nevada), and determined that upper air conditions at the Salt Lake City collection site best represented upper air conditions at the SPC site.

11. One individual commented on the two weather stations (Glennana and Venice) local to the area and tracked apparent periods of inversion through the use of temperature data from each weather station. These two weather stations are relatively close together horizontally, but have a vertical separation of 1000 feet.

UDAQ response:

The 100-meter meteorological monitoring tower used by NEVCO also collected vertical temperature data at multiple levels (2m, 10m, and 100m).

12. UDAQ also received comments on the local terrain and the effects of the nearby mountain ranges on high-pressure systems, dispersion, and the lack of a "cleaning effect" on the valley.

UDAQ response:

SPC's analysis of impacts within the Sevier Valley included over 8760 different meteorological simulations representing actual hourly monitored meteorological conditions collected onsite during the required one-year monitoring period. Of the 8760 hours simulated, 22% of the hours contained mixing height less than 300 meters (a height that would suggest that the atmosphere over the area may be inverted). Strongly inverted conditions (mixing height less than 100 meters) represented 7% of the hours in the simulation. The effects of terrain were also considered in the analysis, as required in the EPA – Guideline on Air Quality Models.

13. "PM_{10} particles. On page 6-20 it states that, "Utah has adopted the federal National Ambient Air Quality Standards (NAAQS)." Yet, Table 6-11 [of the NOI – jj]

clearly shows that PM_{10} is not within compliance of NAAQS and on page 6-22 states that PM_{10} values exceed allowable amounts."

UDAQ response:

The commenter is referring to the modeling result in the cumulative NAAQS analysis for PM_{10}. This portion of the air quality impact analysis indicated that emissions from two gypsum facilities located one and a half miles southeast of the proposed power plant resulted in model predicted exceedances of the 24-hour and annual PM_{10} NAAQS immediately adjacent to their property boundaries. Additional analyses were performed by SPC and the UDAQ to identify emission sources that were significant contributors to the model predicted exceedances, and to quantify each source's contribution. Results of these analyses indicated that the majority of the predicted values (over 98%) were contributable to operations at the two gypsum facilities, and that the proposed power plants did not significantly contribute to the predicted concentrations. For both the highest 24-hour and annual predicted concentration levels, the SPC project contribution made up less than one percent of the total predicted concentration. Therefore, it is UDAQ's determination that the proposed construction of the new power plant would not cause an exceedance of the NAAQS for PM_{10}; nor would it significantly contribute to any model predicted exceedances of the NAAQS in the Sevier Valley.

14. "Also, there is another major PM_{10} contributor in the area, which was not included in the NOI. The Western Clay Company of Aurora, Utah releases large amounts of dust, which travels for miles. [Photos were included – jj] These photos show how much PM_{10} was not included. A permit should not be issued until all PM_{10} sources are considered and new modeling shows that the plan meets NAAQS."

UDAQ response:

Prior to the commencement of the air quality analysis, the UDAQ worked with NEVCO to establish a modeling methodology that would provide the most accurate assessment of the impact of the proposed project on the surrounding environment. As part of the cumulative impact analysis, the intended goal of the analysis was to include impacts from the proposed project along with other sources in the area showing emission inventory levels that may contribute significantly to model predicted impacts. The Western Clay Company of Aurora was identified in the emissions inventory search as a source of PM_{10} emissions in the Sevier Valley. The Western Clay Company of Aurora was excluded from the analysis because the distance between this source and the proposed SPC site was too great given that Western Clay Company reported less than 5 tons of PM_{10} emissions in the previous years.

15. "Future growth of the area. The NOI does not take in consideration of future growth within the confines of Sevier Valley. During the last 10 years Sevier County has experienced 16.6% population growth and since 1970 to present the area has increased 91% nearly double. Also, I-70 traffic has increased greatly during the last 5 years. It is clear that the growth of the area will greatly increase pollution levels."

UDAQ response:

The UDAQ reviewed past area source growth for the Sevier Valley and determined that the most accurate representation of the effects of that growth could be represented in the analysis through its inclusion in the ambient monitoring value used to account for normal background concentrations. Computer modeling indicates that the impact of the proposed project is not expected to significantly contribute to any areas presently showing signs of substantial growth in the Sevier Valley. Similarly, ambient monitoring data for this area does not support any assumption that the NAAQS are threatened by any future area source growth projections. Also, please see UDAQ's response to comment #57.

16. "Lack of information about ammonia 'slip.' On page 5-5, ammonia slip is mentioned but no amount is ever mentioned. The volume of ammonia slip needs to be included in the modeling."

UDAQ response:

Ammonia slip is the amount of excess ammonia that is included in the exhaust stream after the gas has passed through the SNCR control device. Ammonia is not a regulated air contaminant. There is no federal or state requirement for conducting any air quality analysis for ammonia as part of the regulatory permitting process. However, ammonia is often looked at for its potential contribution to secondary particulate formation and as a measure of the efficiency of the SNCR control device. In this case, the source is expecting a 10 ppm ammonia slip.

17. "Air modeling team was not qualified to make any determination on soil and vegetation. Pages 7-43 and 7-44 [of the NOI – jj]. To my knowledge there is no one in the Meteorological Solutions Staff qualified to make determinations of effects on soils or vegetation. There are many native riparian plants in the locally important springs and riparian zone of the Rocky Ford Reservoir. This riparian zone is approximately one mile from the SPC site yet it is brushed off. If the effects of the SPC pollutants on soils and vegetation are needed for this permit then the information on all local native vegetation needs to be included and done by qualified persons. Also, if the flora and soils could possibly be effected [sic] then the fauna could be too. There are several endangered species such as the Bald and Golden Eagle, which use the area for extended periods during the winter months. Also, Pygmy Rabbits, a Utah species of concern may inhabit the immediate area."

UDAQ response:

The soils and vegetation analysis was not performed by Meteorological Solutions, but was instead conducted by:

Red Elk Consulting
Gary H. Richins
Certified Wildlife Biologist
230 East 700 North
American Fork, Utah 84003

18. “The dismissal and disregarding of data. Page 6-12. It is unclear how data, which could be crucial to the dispersal of pollutants, is just disregarded. The addressing of “calms” by simply ignoring them is not appropriate. If there is not enough wind to disperse pollutants, common sense says that the pollutants will be concentrating. If the model used is inadequate for this type of data then the modeling, which can address this data should be used.”

UDAQ response:

In the SPC analysis, all periods of calm or light wind were evaluated in accordance with the EPA – Guideline to Air Quality Models. In regards to the commentators note that the lack of wind would result in higher concentrations, the main boiler’s plume would be warmer than the surrounding air at its point of release, and during calm conditions would rise higher into the air than a similar plume release under windy conditions. The additional plume rise would result in lower ground concentrations rather than higher ones.

19. “Lack of comprehensive modeling the accumulative impacts other projects. During the past year or so several other power plants and or additions to power plants have been proposed. The impact areas/zone of these projects needs to be evaluated together. The individual evaluation of these projects ignore the fact that these can and will have areas of common impact. Modeling for this situation needs to be addressed.”

UDAQ response:

The comment specifically refers to the requirement in PSD modeling that the impacts of other sources in the area need to be included in the analysis. Per EPA’s – Guideline to Air Quality Models, the SPC analysis used modeling results to determine the range of significant impact for each pollutant. This is the distance at which the pollutant coming from the source has dispersed to a point where its concentration is less than 4% of the air quality standard. An additional distance of 50 kilometers was added to this distance to define the area of concern for the cumulative analysis. All sources emitting significant amounts of emissions within this area were included in the analysis. All of the power plants projects referenced by the commenter were located well outside the defined study area, and were not required to be included in the SPC analysis. The UDAQ modeling staff did conduct its own in-house review of the potential cumulative impact of the new power plant projects with the existing power plants. To date, staff members have not identified any areas where the combined impact of existing and future power projects would exceed an air quality standard.

20. UDAQ received a number of general comments requesting that UDAQ conduct further studies of the potential health impacts of the hazardous air pollutants proposed to be emitted by this source. Included in the requests was mention of arsenic, mercury, selenium, and radiation.

UDAQ response:

UDAQ would not undertake additional studies of health impacts, as these fall under the purview of the Department of Health. Health impact studies would not be performed unless

modeling AND risk assessments suggested a potential threat. For radiation concerns, please see UDAQ's response to comment #21.

21. UDAQ received three comments regarding the potential emissions of radiation from this source.

UDAQ response:

Radiation is regulated by the Division of Radiation Control. UDAQ has no legal or regulatory authority over radiation or radiation emissions and therefore cannot impose conditions relating to possible emissions of radioactivity.

22. UDAQ received three comments regarding the coal storage at the proposed source. These comments covered the following:

    a. Transport by truck – are there potential emissions from these trucks? Windblown duct emissions? Road Dust?

    b. Coal conveyors – drop point emissions? Covered versus uncovered conveyors? Windblown Emissions?

    c. The coal storage pile – windblown emissions?

UDAQ response:

The trucks being used for coal transport are enclosed or covered to minimize windblown emissions. Enclosed trucks are pneumatically loaded and unloaded.

The coal conveyors are all covered, minimizing windblown emissions. Drop points are all controlled with dust minimization controls such as enclosed drop boxes, dust socks, or the like.

Based on the comments received, Sevier Power Company has decided to voluntarily enclose their coal storage pile to minimize fugitive dust emissions. This change will be made enforceable and will be included in the final AO issued to the source.

23. Similar questions were asked about the limestone and lime material handling at the proposed source:

    a. Where are the limestone loads coming from?

    b. Where is the limestone being crushed and dried?

    c. Doesn't this process of crushing and drying also require an air permit?

    d. Open storage is an invitation to windblown dust problems and is unacceptable.

UDAQ response:

Off site materials processing that is not controlled by Sevier Power Company is not included as part of this AO. If the limestone processing takes place within the State of Utah, an AO most likely is required as per the requirements of R307-401, UAC. However, this AO is not required to be obtained by SPC, but by the entity that owns and operates the limestone processing source.

The limestone and lime used by this source will be stored in enclosed storage silos. There will be no windblown emissions from these silos. The silos themselves are fed and discharge pneumatically, also minimizing emissions.

24. "While the material handling for the ash from the boiler and stack is mentioned as being an enclosed system, it is just casually mentioned that 'The ash byproduct will be transported daily off-site to an approved ash disposal site in covered trailers….' Isn't the disposal of the by-product and ash an integral part of the process of boiler operations? Shouldn't this be considered integral to the operation of the proposed plant? What is the definition of an 'approved ash disposal site?"

UDAQ response:

The ash, both bottom and fly ash, from this source will be transported off-site to a landfill approved by the Division of Solid and Hazardous Waste for the disposal of coal-fired boiler ash. While the commenter is correct that removal and disposal of the ash produced by this source is an integral part of the process, it is not covered as part of this AO. Once the material has left the site in covered trailers, final disposal is regulated by the Division of Solid and Hazardous Waste.

25. " 'The plant control and DAS will be integrated into one system to provide power control action and plant monitoring capacity for startup, transient and steady-state operation and safe shut down.' In a nuclear facility this 'operating system' must be certified before startup and periodically tested to assure correct and safe operation. This is built in redundancy? What system certification is required with this proposed plant to assure both safety and compliance with the emission limits?"

UDAQ response:

The plant control system is not regulated by UDAQ directly. That is, there are no requirements imposed by UDAQ on such a system. Rather, there is only a requirement that the system be designed to comply with all requirements of the issued AO. Testing and certification of this system is carried out by the Occupational Safety and Health Administration and the Department of Energy on a federal level, and with the Public Service Commission and Utah Occupational Safety and Health on the state level.

26. Sixteen individuals submitted comments on scenic issues, specifically relating to visibility concerns.

UDAQ response:

For visibility concerns please see UDAQ's response to comments #39 and 61.

27. "I can find no reference to the existing sources of background concentrations. There are numerous ones in the area with many recent changes in business and management practices."

UDAQ response:

Background concentrations for the SPC analysis were taken from the following locations: NO_2 – UDAQ default value for rural areas in the west, CO – UDAQ default value for rural areas in the west, SO_2 – rural ambient monitoring conducted by the Intermountain Power Plant 2001-2002 at the IPP site, PM_{10} – rural onsite ambient monitoring conducted by NEVCO 2001-2002. The UDAQ modeling staff has reviewed the ambient background data available for the central Utah area, and for the purposes of this analysis, consider the values used to best represent worst-case background concentrations for the Sevier Valley.

28. "The following statement: 'The plant is at an elevation of 5220 feet with distant terrain features that have little effect on concentration predictions' is the most ludicrous statement that could be made concerning this proposed plant. This valley is a three dimensional valley, not a two dimensional map. For anyone to predict airflow through this valley, it is necessary to construct a detailed three-dimensional model including the effect of each canyon and peak. I am conservative in stating that there are over 50 terrain features within the valley that have significant impact on microclimate air flows which, in turn, will dramatically impact concentrations of airborne pollutants. I feel this assumption invalidates the entire document and a complete new model is warranted."

UDAQ response:

The commenter appears to have misinterpreted the statement made in the state air quality modeling report. The intent of the statement referenced is that elevated terrain features near the SPC site are not close enough to the main stack, to cause the plume to impact on the terrain before it has had a chance to mix with cleaner air, and dilute to a concentration level that is well below the air quality standards.

29. "Is the area within the plants proposed boundaries the only place air quality is of concern? It is the surrounding areas where many homes are present that is of primary concern. It is these residents who will feel the greatest impact of any added pollution."

UDAQ response:

The area within the plant boundary is used as the most representative of ambient local conditions. Meteorological conditions are monitored at this location for use within the dispersion modeling performed by the source. The dispersion modeling analysis is what predicts the effects of the proposed power plant on the local environment.

The area beyond the plant boundary is the primary area of concern in the modeling analysis. Utah Air Conservation Rules require all sources receiving an air quality permit from the State of Utah to comply with federal air quality standards in all areas to which the public

may have access (commonly referred to as areas of 'ambient air'). In general, ambient air is defined as any area beyond the sources property boundary or fence line.

30. "What relevance does the 'wind speed and direction data' collected at 10 and 100 meters on the sited tower have? This monitoring site is in the venturi of Sevier Valley and does not represent the dispersion and deposition areas. It is in no way representative of the air profiles throughout the Sevier Valley as stated above."

UDAQ response:

Please see UDAQ's response to comment #8.

31. " 'One year of rural SO-2 monitoring data collected at a site 50 miles northwest of the proposed Sigurd site --.' What does some data collected in (Nephi?) have to do with air currents within Sevier Valley? The terrain profiles are significantly different. This, again, is invalid data and must be corrected."

UDAQ response:

The purpose of a background concentration in an air quality analysis is to account for any sources of the pollutant that would not be accounted for in the dispersion model. The only large sources of SO_2 emissions in central Utah capable of regionally affecting air quality are the coal fired power plants, which could be represented in the model. Since the majority of air flowing through the region comes from the west, the IPP site [see comment #27 – jj] provided the best available information on regional SO_2 levels without the influence of any nearby major industrial sources, which might skew the data.

32. " 'Background concentrations of SO_2, NO_2, and CO were obtained from the UDAQ's database for ambient pollutant monitoring.' I am not aware of the Department monitoring any background pollutants in Sevier Valley, just two or three source reports. Do you have any information to the contrary?"

UDAQ response:

Please see UDAQ's response to comment #27.

33. "There are very few participants in the Mesowest network throughout central, southern and eastern Utah. Is the data collected from these dispersed sites relevant and meaningful?"

UDAQ response:

Data collected by the Mesowest network was used in the Calpuff modeling analysis. All available surface data observations from Mesowest for the study region were used in the analysis. This data is combined with the MM5 data in such a way as to fill in areas of the state where no Mesowest data exists. Since all available stations were used, the UDAQ considered the analysis to follow EPA modeling guidelines and therefore acceptable for use in the Calpuff modeling analysis.

34. One commenter stated:

" 'Sevier Valley is a bowl shaped valley, slightly open at the north, some 24 miles distant, but closed at the south, also 24 miles distant from the proposed power plant site. The valley is also hour-glass shaped with the neck at the proposed plant site.'

I suspect, from reading this paragraph, that the pollutants are considered to disperse evenly over the projected radii of 22.4 kilometers for NO-2, 12.5 kilometers for SO-2, and 1.6 kilometers for PM-10. In fact, with our prevailing north or south winds, they will each be concentrated along a narrow belt radiating in only one direction from the proposed plant. The valley is only four miles wide at the south end. A few calculations will show that instead of dispersing uniformly over 1809 sq. km, the pollutants will be concentrated in a wedge shaped area of only 48 sq. km -just 2-1/2 percent of the area. This will raise the concentrations of pollutants well above NAAQS. The average inversion layer during the winter months is only 1,000 -1,200 feet above the valley floor -this data supplied by local pilots who regularly fly the area. Now we have a situation with an area of 48 sq. km and only a 1,200 foot vertical dimension. The pollutants within this wedge of pie will readily make this area one of non-attainment. Proper modeling will show this result.

During the summer months when the prevailing wind is from the south, some of these pollutants will rise above the surrounding mountains and escape to the north while some will be blown up the Sanpete valley through Gunnison, Manti and Ephraim. On the other hand, during periods of winter inversions, it will become greatly compressed in the southern end, directly over Monroe, Joseph and Sevier- with no ability to escape vertically!

Are you able to verify that the pre-construction modeling analysis took into account a full, three dimensional and volumetric analysis of the actual valley?"

UDAQ response:

The Gaussian model used in simulating dispersion of pollutants from the proposed plant uses a 3-dimensional expanding volume approach similar to what the commenter described. It does not automatically distribute the pollutant over an area of pre-defined radius as suggested in the comment.

35. "According to your map on page 6 of the Intent To Approve, the particulate monitoring site is approx. 1-1/2 miles east of Richfield. When the wind is from the south there will be no particulate deposition in this area. It will be north of the proposed plant. When the wind is from the north, particulates tend to be compressed along the western edge of the valley, directly over Richfield. This monitoring site is virtually useless either for collecting ambient particulate data or for monitoring future particulate emissions. How do you justify this site as a viable part of the study?"

UDAQ response:

The purpose of this site is to collect ambient monitoring data from a central valley site for use as a site representative background concentration.

36. "I again suspect that the background and model predicted concentrations reflect a uniform dispersion of the pollutants emitted from the stack, rather than the concentrated dispersion that will most likely occur. Airflows either up or down specific canyons affect the valley micro-climates below. These airflows change hourly and are the result of numerous variables in the local air distribution map. During periods of winter inversions however, all of these currents cease and the stagnant air mass is forced to retain whatever is pumped into it. There is no way that one tower in the middle of the valley could possibly monitor all of these various flows. Therefore, the modeling program is flawed and cannot be validated. A complete, and thorough, new program and study must be created before you sign off on the current submission."

UDAQ response:

Please see UDAQ's response to comments #8 and 34.

37. " 'Maximum predicted concentrations in areas where the Applicant has a significant impact would occur along the eastern edge of the proposed site's property boundary, and is a result of coal handling processes at the plant.' The eastern property boundary is only one mile from the city of Sigurd, directly downwind from the prevailing spring and summer southerly's. You cannot permit this."

UDAQ reponse:

The commenter is referring to the model predicted PM_{10} impacts from coal handling processes, and their impact on the 24-hour PSD increment standard. The model predicted impact is less than the maximum allowed under the federal air quality standard. Therefore, the UDAQ has no legal authority to deny an air quality permit based on this model predicted concentration.

38. "There is a large addition of PM-10 from the gypsum plant located in Sigurd, two miles distant that does not appear on the base line data but is part of the Toxic Release Inventory (TRI). The coal storage pile located in Sigurd is not even listed although it is the size of two football fields."

UDAQ response:

A review of emissions inventory data submitted to the UDAQ by industrial sources operating in the area was conducted by Division modeling staff. This information was used to identify sources whose emissions could combine with the SPC facility to produce model predicted concentrations above the significant impact level. The two gypsum facilities were the only sizeable sources in the area to produce that level of impact. All other sources' impacts are accounted for in the background concentration added to the modeling results.

39. One commenter stated:

"Capitol Reef national Park lies roughly southeast of Sigurd. During the spring and summer westerlies, the air currents flow eastward through Kings Meadow Canyon, through Loa and Bicknell, Torrey and then into Capitol Reef- all roughly following State Route 24. This National Park will be significantly affected by airborne pollutants originating from the proposed plant near Sigurd. There is already significant deterioration of visibility in this park from power plants in southeastern Utah. We do not need any increase over this area!! Any National Park personnel that signed off on this alleged study could be liable for future degradation of visibility. Are you sure they are aware of this situation? At least one visitor station within the park deals directly with reduced visibility over the park, picturing distant terrain features as viewed on a clear day and with haze present. Quite a difference!

During the spring of the year, the south winds scour a great deal of dust from the freshly plowed fields which -I am sure- would make PM-10 levels worthy of designating the valley a non-attainment area.

Remember, this proposed power plant will be emitting pollutants 24 hours a day, seven days a seek, 52 weeks a year. We already have numerous airborne pollutants from our agriculture. We accept these for two reasons: A large part of our economy is based upon agriculture and (2) the airborne pollutants are intermittent. Once the irrigation season commences, much of this PM-10 pollution disappears.

Now, this is what I find most offensive, and possibly illegal. I can find no reference in your State Implementation Plan (SIP) that refers to any base line data for Sevier County. Are you just guessing about the air quality in this county? Do you have actual data from monitoring stations within this county and are you willing to share this data? The only reference I can find to data concerning pollutants in the air in Sevier County is from data supplied by Cox Rock and Hales Sand and Gravel, both in Elsinore and from the gypsum plant in Sigurd.

I believe this modeling of the air is seriously flawed and invalid for determining the effects of the proposed power plant on the air quality of Sevier Valley and possibly even the Class 1 area of Capital Reef National Park. I hope that you will see the validity of my concerns and request NEVCO to undertake a complete new study with accurate modeling."

UDAQ response:

The air quality analysis conducted by SPC is based on the use of EPA's- preferred models. The models were developed by the EPA, and are considered the most suitable for the type of analyses SPC was required to perform. All modeling conducted by SPC is consistent with EPA modeling guidelines, and meet all regulatory requirements for the air quality permitting. The analyses did not identify any threat to federal air quality standards or air quality related values as visibility from the proposed project. In the case of PM_{10}, one full year of ambient monitoring data was collected which is representative of the general air

quality in the Sevier Valley. This data indicated that on the worst day, air quality levels were still well below the federal health standard, and on the average day, were less than 20% of the standard.

40. "I would like to cover some issues that I am not sure you will consider but needs to be looked at by someone. One of those things is Homeland Security. The Sigurd Substation is a major distribution system for the Western United States. As such, when the threat of terrorism is elevated it is one of the places that has armed volunteer Deputies guarding the area 24 hours a day. The power plant would add to that terror threat."

UDAQ response:

Homeland Security is not something that UDAQ has any control over. The comments were noted. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

41. "In a letter dated, February 27,2004 to Clark M. Mower from Rusty Ruby, a copy of the letter was sent to the Central Utah Public Health Department. I checked with the Health Department and they are not sure what their role is in this process. Can you inform us of their role?"

UDAQ response:

UDAQ provides information to the local Health Departments for their knowledge. Often the local agencies are asked questions that are air quality related. By supplying these agencies with the latest information from UDAQ, they are able to adequately address these questions and also refer the inquiry to the appropriate people at UDAQ to supply more information. The Health Departments do not have a particular step in the permitting process as an agency, although they are certainly allowed to comment during the comment period, and they are given as much information as possible or requested during the process.

42. "Another item that came up during the public hearing was one of enforcement of current regulations. There are a number of violations of the truck-out or drag-out rule in our County. It was indicated that citizens should report these incidents. While we agree that citizens' involvement is important in the overall program, it is our position that the Division of Air Quality needs to take a more aggressive role in this problem. A more intensive enforcement and education program seems to be needed in our area."

UDAQ response:

The compliance section of the Utah Division of Air Quality not only performs regular inspections of the sources within Utah, it also investigates reported violations, oversees stack testing and reviews testing protocols, and also does periodic observations of multiple different factors relating to air emissions at sources not necessarily scheduled for regular inspection. Obviously the compliance inspectors cannot be everywhere at once, so some reliance on members of the local public is necessary. The public is able to conduct far more frequent observations and may notice intermittent problems that a periodic inspection might

not. As for education, UDAQ has several items of documentation, and training manuals that are provided for members of the public to gain knowledge. UDAQ staff is also responsive to phone calls and emailed questions.

43. "One item of great interest in this proposed power plant is the matter of responsibility. There are two fish hatcheries near the proposed site. We have nurseries and organic farmers in the area. Who is responsible for ill effects on these activities? People are already seeking legal advice but why were these problems not considered in the application process?"

UDAQ response:

As part of the PSD application SPC submitted, they were required to perform an analysis of the impairment to visibility, soils and vegetation, as outlined in R307-405-6(2)(D), and in 40 CFR 52. UDAQ reviewed the analysis and feels it satisfies the requirements of this rule.

44. "H. Associated Equipment - [a] Change the words Diesel-fired to Natural gas-fired and strike the words, 'Diesel storage tanks.'"

UDAQ response:

The section referenced specifically refers to Condition #7.H of the Intent to Approve (ITA), which lists associated equipment such as a diesel-fired emergency fire pump and a diesel-fired emergency generator. As these items are needed for emergency purposes, requiring a long period of inactivity followed by immediate start up for a short period of time, only certain types of equipment are feasible. Diesel-fired equipment of this type has proven its reliability and functionality. With the equipment in question, SPC meets the requirements of BACT and will be in compliance with the National Ambient Air Quality Standards (NAAQS).

45. "8. Change the last sentence to read, 'Intermittent recording of the reading is required.'"

UDAQ response:

This comment refers to Condition #8 of the ITA. The condition refers to installing a manometer or magnehelic gauge to read the pressure drop across the fabric filter. This type of device is useful as a secondary device to detect possible problems in the filtering efficiency of the fabric filter (baghouse). As the source is agreeing to a 10% opacity limitation (see UDAQ's response to Comment #88), this device is primarily useful for spot-checking purposes as part of the source's requirement of proper operation and maintenance. UDAQ does not feel that continuous recording of pressure drop is warranted in this case for such a device.

46. "Page 6 - All sections should be rewritten to conform to suggestions made for the 'New Source Review' document to follow in other letters"

UDAQ response:

UDAQ is not certain what this comment addresses. Additional comments were received from this commenter, but this type of general comment is difficult to address. Instead UDAQ will respond to these additional comments in turn.

47. "@ change to test every year."

UDAQ response:

This comment refers to the PM_{10} testing frequency requirement listed in Condition #11.B. The source has agreed to more frequent stack testing. See UDAQ's response to Comment #71 for further details.

48. "Last paragraph- Change the words 'no greater than 110%' to 'no greater than 90%', and the last sentence should read 'content value of 90%'. This is more inline with current research on the effects of mercury on the environment. This would only be until the next emission testing."

UDAQ response:

The purpose of this condition (#13 of the ITA) is to allow the source to operate with variable coal quality and still meet the limitations of the mercury MACT requirements as listed in the January 30, 2004 proposed EPA mercury MACT standard. The source needs the flexibility to run stack tests at gradually increasing coal mercury contents in order to determine the upper limit of coal quality and also to allow for minor fluctuations in coal quality as part of day-to-day operations.

The commenter's suggestion would impose a 90% limitation on coal mercury content after a successful test. Furthermore, the source would only be able to conduct future tests at this 90% limit without being in violation of the listed condition (#13). Each test would multiply the allowed mercury content by 0.9, in effect slowly forcing the source to operate with coal of continually decreasing mercury content. This is contrary to the design of the condition, in that a source can only use coal which passes the stack test requirement, or coal with a lower mercury content than that coal. If the source wishes to use coal with higher mercury content they may test at a higher content (but no more than 110% of the previous test each time) in order to prove that this "worse" coal is acceptable under the conditions of the AO.

49. "We believe that the NOI should be reviewed and updated as many things have changed after that review was completed. The results go as far back as 1999 and new power plants have been permitted after those dates. The new plants will in our view change the results. This will include the regional haze to the National Parks."

UDAQ response:

This comment is very similar to Comment #19 listed above. See UDAQ's response to that comment for details.

50. "Question: What is a good engineering stack? This should not be left up to someone else to determine. It should direct them with more direct wording. The qualifications of the engineer of should at least be stated."

UDAQ response:

A Good Engineering Stack is a stack, which follows Good Engineering Practices (GEP) as prescribed in EPA's guidance documents.

51. "Nowhere in the section 1.5.2.2 to 1.5.2.4 does it define exactly the dust control system. Each point of transfer should be stated and how the dust will be controlled."

UDAQ response:

The sections of the New Source Plan Review referenced by the comment are referring to the Best Available Control Technology discussion of the limestone and lime handling systems. These systems are enclosed at every point after the silos are filled from the storage piles. As there will be no emissions from the enclosed part of the system, no further discussion of transfer points following the silos is required. The source has agreed to covered conveyors and dust control systems (typically fabric or cartridge filters) at all non-enclosed transfer points. These latter changes to the conditions proposed in the ITA will be included in the final AO.

52. "5.2.5 Ash Handling System - this section states 'The ash by-product will be transported daily off -site to an approved ash disposal site in covered trailers that deliver coal to the plant.' Question: Truck drivers currently hauling coal have told us that the same trucks hauling coal cannot be used to haul away the ash. This is because it is so corrosive it eats the trailers up. That is why concrete or carbon steel silos are used."

UDAQ response:

This is apparently a typographical error. UDAQ has reviewed the sentence in question and determined it was included in error. The New Source Plan Review will be updated with the correct information which should read: "The ash byproduct will be transported daily off-site to an approved ash disposal site in covered trailers."

53. "Page 19 Fire Pump - The section states again 'diesel-fired.' This section should read Natural gas-fired as it is cleaner burning fuel."

UDAQ response:

See UDAQ's response to comment #44.

54. "Page 20 Water Treatment System - this section states, 'The SPC Project has acquired enough underground water rights to easily supply the facilities water requirements. It is estimated that 155 acre-feet of water is needed annually for the project. The plant will consume approximately 87 gallons of water per minute.'

    Question: The SPC Project has no water at this time. They have water on option and we understand at this time one of the options has been withdrawn. It states the plant will consume approximately 87 gallons of water per minute. This cannot include all the water the plant will use. Much water will be used for drinking, cleaning, watering down, and etc. The first

NOI stated 400 gallons per minute, which is probably closer to the real amount. Water consumption can be calculated very closely by engineers working in the water use industry. I would think that the 87 gallons is what the boiler would use."

UDAQ response:

Sevier Power Company has stated that they have enough water rights for operation of the plant. This statement was made in reference to a question asked by the UDAQ review engineer in reference to water usage and consumption. The original NOI submitted by the source was turned in incomplete. UDAQ reviewed this original submission under the request of the source to look at feasibility issues, and to establish the original modeling parameters. It was not used in completing the New Source Plan Review or the ITA. The original NOI included a different form of cooling technology, specifically a traditional water cooling-tower arrangement. This technology was replaced by the air-cooled condenser submitted as part of the complete NOI received by UDAQ in September 2003.

The replacement of the water cooling-tower with the air-cooled condenser allowed for a substantial water savings. The plant will consume approximately 87 gallons per minute of water for all purposes. The access roads are planned to be paved, so no water will be required for dust control purposes along these roads.

55. " 'during 2001-2002 reported high second highest 24-hour average concentration of 9ug/m3 for the period.' Question: Why did you not use the highest 24-hour average? You also used second highest for PM_{10}."

UDAQ response:

For purposes of compliance with the SO_2 NAAQS, federal regulations allow for one exceedance of the 3 and 24-hour standard of that pollutant. Therefore, sources conducting an air quality analysis based on a full year of meteorological data may exclude the highest model predicted value and use the second-highest value in reporting their results, as outlined in EPA guidance and PSD regulations. Similarly, if a source conducting the onsite monitoring collects ambient concentration data on a continuous basis for the required one-year period, they may exclude the highest monitored value from use as representative background. The second highest monitored value is then used to represent background concentrations in the analysis. This is what was done in the NEVCO analysis.

For PM_{10}, the highest 24-hour concentration monitored during the one year occurred on June 1, 2002, during a summertime high wind event when southwesterly winds carried fire smoke over the area from Southern California. Most of the afternoon was marked by wind gusts exceeding 10 m/s, with gusts reaching 30 m/s ahead of a frontal passage. . The second-highest recorded values were collected on August 30, 2002, under light to moderate winds with a mild frontal system passing through the area sometime around the start of the sample period. Winds were out of the south-southwest (shifting from the northeast after 2:00 a.m.) through most of the sample period with speeds averaging between 1 and 4 m/s. No major fires where ongoing in the western US on this date that would have contributed to the monitored values. The combination of high winds and fire smoke on the highest monitored day suggested that the monitoring sample was a rare event, and not necessarily

suitable for use in the analysis as a indicator of normal worst-case background levels for the area. Lower wind speeds are conducive with high-predicted ground level impacts in the computer model. Therefore, the use of the second highest monitored value coupled with the second highest impact predicted by the model (occurring during a period of low wind speed) provided the most accurate assessment of the worst potential impact of the proposed project.

56. "Page 25 H. Emission Rates and Release Parameters - Question: You used a 0.9% sulfur content in one base and 0.7% for another. Why?"

UDAQ response:

The difference in coal sulfur content is related to expected values versus worst-case values. For purposes of modeling the impacts from emissions, a 0.9% sulfur content was used for all short-term emission rates. The 0.7% sulfur content value is what is expected for long-term sulfur values. This value was used for long-term modeling issues. The emission rates (both short- and long-term) are monitored by a Continuous Emissions Monitoring system (CEMs), so UDAQ finds this methodology to be acceptable.

57. " 'I.4 Modeling Methodology-Far-Field Analysis A. Required Analysis PSD Class 1 Increment Consumption Analysis.' Question: This section states, 'and any contribution associated with growth and other increment consuming sources affecting the area of study.' We would like to see the formula used to determine the growth. Also, the information we have the wallboard plant that was closed down is now going to reopen in the next year or so. Will this not change the results of your conclusion?

UDAQ response:

The UDAQ relies on State census information to determine growth in rural areas from area sources. For industrial growth, variability in yearly emissions data submitted by the sources is used. The gypsum plant that is temporarily shut down was included in the modeling as operating. Since the gypsum plant will either return to operation under the terms and conditions of an existing AO or will be required to obtain a new AO, Sevier Power Company used the correct modeling methodology in their NOI.

Attached to this Response to Comments is a copy of an email from Douglass Jex of the Utah Department of Community and Economic Development to Linda Conger of MSI regarding growth factors, project impact, and related issues.

58. "Question: What data if any was used to determine the release rates?"

UDAQ response:

The data used to determine release rates for the cumulative analysis were taken from the UDAQ's emissions inventories submitted by the individual industrial sources in the area. These values represent the reported annual tonnage of the pollutant released divided by the reported number of hours per year the facility operated. For the gypsum plants, the release rates are based on the estimated annual PM_{10} emissions listed in the sources Approval Order divided by 8760 hours of operation per year

59. “This section states ‘The US EPA- CalPuff [version 5.5] model was used by the applicant to predict air pollution concentrations in the far field.’ Question: In the NOI it states that the latest version made available in April, 2003 was not used. We expect the latest modeling version to be used.

UDAQ response:

The SPC analysis did use the EPA – preferred version of the CALPUFF model that was referenced in the April 2003 Federal Registry Notice.

60. “ ‘Page 31 Table II - Model Predicted Hazardous Air Pollutant Concentrations’ This table shows:

    Hydrogen Chloride for One Hour would fall in the Acute range by 0.3 and
    Hydrogen Fluoride would also fall in the Acute range by 0.25.
    This is unacceptable to us.
    Arsenic would fall in the Chronic range by 0.00033 and
    Cadmium would also fall in the Chronic range by 0.00007.
    Cadmium falls in the Carcinogen range by 0.0001
    Cobalt falls in the chronic range by 0.001 and
    Selenium in the Chronic range at 0.007

    You indicate that this is an acceptable range. What about the long-range effects and what population of the community will be most effected? In our view these are not acceptable levels.”

UDAQ response:

The various pollutants mentioned above are all Hazardous Air Pollutants. The information listed in the comment comes from a supplemental document to the Notice of Intent submitted by MSI on December 5, 2003. This document contains an Excel spreadsheet listing the actual emission rates and whether each HAP is chronic, acute or carcinogenic. As is required under R307-410-4, SPC did a screening of all the various HAPs, and only a few, specifically HCl, HF, arsenic, beryllium, cadmium, cobalt and selenium, required a more in-depth analysis. For those seven HAPs, more detailed screening modeling was run, and the results of each model run showed no further analysis was required. This information was also summarized within the Excel spreadsheet. UDAQ believes that the confusion comes from the heading on the far right column that says % TLV. It should read % TSL (Toxic Screening Level). Since all the values in this column are less than 100%, i.e., they all fall below the TSL, there was no need to do a risk assessment.

61. “ ‘Page 32 B. Far-Field Results 2. Visibility - Plume Blight’ here it states: ‘Results of the analysis indicates that the plume emanating from the proposed project are [sic] within acceptable limits inside the six class 1 areas.’ It does not state the results. We want to know the results of the analysis.”

UDAQ response:

The table below provides a summary of the plume blight modeling results. As the table indicates, all impacts are within their respective regulatory limits.

Class I Area	VISCREEN LEVEL II RESULTS					
	Winds	Stability	Delta-E		Contrast	
	m/s		Max	Limit	Max	Limit
Arches	8	D	0.057	2.000	0.001	0.050
Bryce Canyon	4	D	0.212	2.000	0.003	0.050
Canyonlands	7	D	0.096	2.000	0.001	0.050
Capitol Reef	5	D	0.514	2.000	0.007	0.050
Zion	7	D	0.074	2.000	0.001	0.050

62. " 'Page 32 and 33 - 3. Visibility- Regional Haze Paragraph #2' – It states 'Flag guidance allowance for further refinement of the B ext value be [sic] incorporating hourly relative data measured at the meteorological monitoring sites located near Class I area of concern.' The data based on the finding from each of the areas in Table 11-9 is not consistent when compared with each other.

UDAQ response:

The amount of light scattering particles affecting visibility over an area is dependent on the transport distance and time from the source to the area of concern, and the available ammonia and water vapor along the transport path. The results among the various Class I areas are consistent with each other in that the Parks that are farther away show less impact than the Parks that are closer to SPC.

63. "Page 45 The paragraph at the top of this page does not inform the public of anything. What and how can the manufacturer guaranty [sic] anything? The sulfur content of the coal in the permit is 0.9% in some places. What does this do to the guaranty [sic]?"

UDAQ response:

The manufacturer's guarantee was included as a measure of confidence that the control technology chosen for the SPC project was reasonable. SPC has chosen a very aggressive SO_2 limitation, one beyond the manufacturer's guarantee, to represent BACT in this case.

64. "Page 46 The first paragraph under the graph states 'based on the boiler manufacturer's guaranty [sic].' The manufacturer's guaranty [sic] should be printed in the permit. What happens if they cannot meet the emission rate?

UDAQ response:

It is not UDAQ's practice to include the manufacturer's guarantee in either the permit or the New Source Plan Review. The guarantee is issued to the purchaser and not to UDAQ. Similarly, the manufacturer and purchaser will deal with any issues relating to the guarantee

– UDAQ will not become involved in such issues. Inclusion of the manufacturer's guarantee in the AO would be an unenforceable condition, and would not impose any limitations on the source.

65. "Page 49 & 50 Graph 111-5b The lowest emission limit reported [0.0024] was the AES-PRCP facility. This is the limit proposed for the SPC Project. The MMBtu/hr is different for the two plants. The AES is 4922.7 and SPC is 23531.5, so how can they be compared?"

UDAQ response:

The commenter incorrectly stated the anticipated hourly heat input rate for the SPC project. The correct value is 2531.5 MMBtu/hr. This value is roughly half of that of the AES-PRCP facility. The two plants use similar methods to control acid gas emissions, in this case, emissions of H_2SO_4. Both plants use limestone within the combustion chamber and a dry lime scrubber to control the flue gas. Since the two sources use similar control technologies for acid gases, it is reasonable to expect to see similar, if not identical, emission values based on a heat input rate. The fact that the heat input rate is different would only result in different total emissions. It would not change an emission rate normalized based on heat input.

66. "Page 50 111.8 BACT for NO_x – Last paragraph states 'Factors that influence NO_x emissions include engine design and operating parameters, type of fuel, and ambient conditions.' The type of fuel should be natural gas. Page 50 to page 57 – All of it should be re-evaluated using natural gas."

UDAQ response:

The factors mentioned by the New Source Plan Review and then restated by the commenter include "engine design." In UDAQ's opinion, this is the most important factor for emergency equipment of this type. As emergency equipment, it is anticipated that hours of operation would be low, so any emission reductions obtained by switching these systems over to natural gas would also be low. See also, UDAQ's response to comment #44 for further information.

67. "Page 65 --Second paragraph states 'The controlled emissions of HCI are based on a 100-percent capacity factor and are estimated to be 4.0 lb/hr or 16.9 tons per year assuming a control device efficiency of 97%.' This entire paragraph was taken word for word from the Dec. 5, 2003 letter to John Jenks from Meteorological Solutions Inc. This paragraph needs to be challenged by Air Quality, as it is not backed up with data. The words 'estimated and assuming' are too broad to take without justification."

UDAQ response:

The use of the terms "estimated" and "assumed" are appropriate for this discussion. The control system is being designed to reduce emissions of all acid gases by neutralization inside the dry lime scrubber. The scrubber is not optimized to remove one acid gas preferentially over all others. Therefore, maximum control efficiency must be estimated for

each acid gas individually. Based on testing from similar systems in use, and on good engineering judgment about the type of system being proposed, a control efficiency value of 97% is quite reasonable. The emission rates of 4.0 lb/hr and 16.9 tons/yr for HCl are calculated from this control efficiency. Since the control efficiency is assumed, the emission rates are therefore "estimated" by definition. SPC has agreed to the 4.0 lb/hr emission limitation for HCl, and a 0.0024 lb/mmBTU limitation for H_2SO_4 as being representative for showing control of all acid gases.

68. "Page 66 --The first paragraph states 'Compliance with PM and PM_{10} emission limits will be proposed in a Compliance Assurance Monitoring [CAM] protocol which will be developed for the project.' The CAM needs to be developed and approved by all parties before the permit is granted.

UDAQ response:

The requirement of a Compliance Assurance Monitoring [CAM] protocol is part of the Title V Operating Permit conditions. This source is not required to submit an application for a Title V Operating Permit until one year from the date of commencing operations under R307-415-5a(1)(b). The CAM protocol will also not be required until that time. When such requirement is imposed on the source, the public will be given the opportunity to review and comment as part of the Title V Operating Permit public comment period.

69. "Page 67 -Under General Conditions #5.A 'Emission inventories five years from date of each emission statement or until the next inventory is due, whichever is longer.' The number of years for emission inventories should be changed to One Year due to the number of people living near the plant. Under B. 'All other records' should be changed to Two Years for the above same reason.

UDAQ response:

The commenter is referencing the New Source Plan Review. The condition referenced is Condition #5 of the ITA. The record retention periods listed are the minimum period for which records shall be kept and made available to the Executive Secretary upon request. Changing these periods to something less than "Five Years" would be a relaxation in the proposed condition. The periods of collection of emission inventories are referenced in Condition #25, which references the R307-150 Series of the Utah Air Quality Rules, which covers emission inventories, testing and monitoring. Typically UDAQ imposes a two-year record retention requirement. As this source will become subject to Title V upon commencement of operation, UDAQ increased the record retention period to five years.

70. "Page 69 -# 9. -This section indicates the construction and/or installation must be begun within eighteen months from the date of this AO. NEVCO has continually stated that construction will take at least 3 years and maybe more. So, my question now is this; what kind of documentation will be required to show continuous construction? What conditions must exist to revoke the AO in accordance with R307-40l-11?"

UDAQ response:

The commenter references the New Source Plan Review – Condition #9 of the ITA. This condition is a requirement imposed to ensure the validity of the chosen BACT for the project. BACT is often time sensitive, as advances in technology slowly improve control efficiency. To ensure that the source is applying BACT, as determined at the time of issuance of the AO, the source must show a continuous process of construction or installation. Eighteen months was chosen as a representative period in which justification must be given to the Executive Secretary as to the current status of construction (see R307-401-11). If continuous construction or installation is not proceeding, and the source is unable to adequately explain this, the Executive Secretary may revoke the AO. Should the AO be revoked, the source must submit a new Notice of Intent, with a new BACT discussion and analysis, before approval would once again be granted in the form of an AO.

71. "Page 70 -B. Testing Status. '@ - Test every five years' should be changed to 'Test every year.' We have very changeable weather patterns and testing more frequently is necessary to assure compliance."

UDAQ response:

While weather patterns should have limited effect on the plant's combustion processes and therefore on emission rates, SPC has agreed to increase the frequency of testing to "Test every two (2) years." This change will be included in the final AO.

72. "Page 71 - I. Sulfuric Acid -This section should be changed to read 'The test method shall be submitted for approval prior to issuance of the AO' so public notification can take place. If the method is not submitted, the AO should not be approved."

UDAQ response:

The comment is valid. The section referenced (Condition #11.I of the ITA) will be updated to read "40 CFR 60, Appendix A, Method 8, or other testing methods approved by the Executive Secretary."

73. "Page 73. C. The 4,000 gallons of diesel should be eliminated, as there is no need for diesel if they use natural gas as the fuel for the emergency generator and fire pump."

UDAQ response:

Please see UDAQ's response to comments #44 and #66.

74. " 'Page 74- Roads and Fugitive Dust -18.' This section should include the plan that was submitted to the Division of Air Quality for control of fugitive dust emissions and until it is, do not issue an Approval Order."

UDAQ response:

The requirements of Condition #18 of the ITA reference a need to abide by all applicable requirements of R307-205. This section of the rules applies to Fugitive Emissions and Fugitive Dust Sources. These requirements cover the need to minimize fugitive dust from

areas such as storage piles, unpaved roads, and the like. The rule only requires that fugitive dust be minimized. It does not require that the source choose a specific minimization plan that must be spelled out in the permit. UDAQ has found that these dust control plans can be variable depending on weather conditions, ambient temperature, the type of materials being stored or handled, and even the quality of solid fuels being stored for future combustion. Rather than clutter the AO with variable conditions such as these, it is better practice to require that the source simply document the dust control methods utilized. SPC is planning to pave all onsite haul-roads, and their coal storage will be enclosed within a building (see UDAQ response to Comment #22).

75. " 'Page 75 Monitoring -Continuous Emission Monitoring 24.' Last paragraph should be rewritten to say 'During' and strike the words 'Except for'. During system breakdown, repairs, and etc. the monitoring needs to be continuous for the health and safety of the people living nearby."

UDAQ response:

The last paragraph of that condition (#23 of the ITA) is specifically referencing the breakdown, repairs, calibration checks, and zero and span adjustments of the CEM system itself. UDAQ does not feel it is appropriate to require that the CEM system perform monitoring when that system itself is in a breakdown state. Assuming the CEM system is functioning properly, continuous monitoring and recording of emissions data will take place even during breakdown of the boiler, fabric filter, dry lime scrubber, or other components of the plant.

76. " The wind during the model that was experienced at the site of the monitoring tower does not represent wind currents as we will experience them in the future. I am concerned about the emissions hanging in this valley and most importantly causing a health hazard for residents living near the smoke stack and impact area beyond. How can people with breathing difficulties cope?"

UDAQ response:

Please see UDAQ's response to comment #8.

77. "Has the truck traffic during construction and the influx of heavy construction equipment been considered in the modeling?"

UDAQ response:

Construction activities are not considered part of normal operations, as they occur only during the time the source is not yet in operation and are therefore excluded from air quality analysis process. Construction activities are typically regulated under the rules for minimization of fugitive dust, as expressed in R307-205.

78. "What amount of mercury will be emitted from the smoke stack? Is mercury monitored by the EPA?"

UDAQ response:

There was an unfortunate typographical error in the ITA (Condition #13). It inadvertently listed mercury emissions as 0.000004 lb/MMBtu, which equates to about 80 pounds per year of mercury. The correct value should have been 0.0000004 lb/MMBtu or 4×10^{-7} lb/MMBtu – which equates to a value of about 8 pounds per year. This value is now properly expressed in the final AO. EPA monitors mercury emissions on the regional level, and relies on federally issued or approved permits for limitation of mercury emissions on a source-by-source basis.

79. "A health risk assessment must be performed. If UDAQ can perform a health risk assessment on the gas-fired power plant located 1.2 miles east-northeast from Orem, Utah, it can perform one on the coal fired plant proposed near Sigurd, Utah."

UDAQ response:

UDAQ assumes that the commenter is referring to either the proposed Calpine Energy Power Plant, located west of Orem, or the Pacificorp Currant Creek Power Plant, located near Mona. UDAQ is not aware of a health risk assessment having been performed for either of these two sources. Please also see UDAQ's response to comment #60 for additional information on health assessments.

80. "A haze analysis was made for the National Parks (class I areas) but was not done for the Sevier Valley. The citizens of Utah and Sevier Valley deserve the modeler information that tells them what to expect for haze."

UDAQ response:

There is no regulatory requirement under the PSD regulations for assessing visibility impacts in Class II areas such as Sevier Valley. These regulations only require a haze analysis for Class I areas, which consist of the five National Parks in Utah, and other areas outside the state. UDAQ cannot require that a source perform additional modeling or visibility analysis outside the requirements of state and federal rule or regulation.

81. "An estimation of radioactivity and how it compares to the background radioactivity is imperative to any coal fired power plant. The rate of cancer in Sevier Valley is extremely high due to the yucca flat exposure and any additional increment of radiation is only going to make the risk greater. The added radioactivity from coal cannot be accepted no matter how small it may be."

UDAQ response:

See UDAQ's response to comment #21

82. "CO_2 recovery is easily done as can be observed at the coal fired Warrior plant in Maryland. Many business and civic leaders traveled to see this plant and spoke of how great the plant was. That plant had CO_2 recovery. The ethics of adding four billion three hundred and ninety-two million six hundred and fifty-four thousand pounds of CO_2 to the atmosphere is unacceptable. The consideration of whether CO_2 emissions are considered a cause of global warming or not do not change the ethics of disposing this material into the atmosphere.

UDAQ response:

Please see UDAQ's response to the next comment (#83) for details.

83. "The ITA fails to address carbon dioxide and other greenhouse gas emissions"

UDAQ response:

This comment addresses the volume of carbon dioxide emissions estimated by the source, as well as potential (but undetermined) emissions of nitrous oxide (N_2O). While greenhouse gas emissions are potentially an area of concern, currently UDAQ has no legal or regulatory authority to limit or control these emissions. The commenter mentions a suit filed in federal court attempting to require that EPA regulate greenhouse gas emissions (see also comment #110). At the time of preparation of this response to comments, this suit has not been settled, nor has EPA begun regulation of greenhouse gas emissions. As no technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

84. "Federal and State clean air laws require NEVCO to consider the application of production processes and available methods, systems and techniques to lower airborne contaminants."

UDAQ response:

This comment is specifically asking UDAQ to require the source (Sevier Power Company – through their parent company NEVCO) to conduct a thorough evaluation of IGCC as part of the BACT review process. The comment given above was expressed with several hundred pages of additional commentary and literature on the benefits of IGCC. However, the comment itself was best expressed as given above - that IGCC needed to be considered as part of the BACT design process. UDAQ's response to the comment speaks of a fundamental difference in the understanding of the rules governing the application and consideration of BACT. UDAQ's definition of BACT, as taken from R307-101-1, is in agreement with the federal definition found in 40 CFR 52.21(j) and reads as follows:

> *"Best Available Control Technology (BACT)" means an emission limitation and/or other controls to include design, equipment, work practice, operation standard or combination thereof, based on the maximum degree or reduction of each pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall applications of BACT result in emissions of any pollutants which will exceed the emissions allowed by Section 111 or 112 of the Clean Air Act."*

The commenter specifically references the first part of the definition, which mentions that 'design' needs to be considered as part of the BACT selection process. UDAQ does not disagree with this interpretation, but feels that stopping here in the definition does not go far enough. Further along in that same sentence is a section which reads: "...determines is achievable **for such installation** through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant." (Emphasis added)

UDAQ views this section of the definition to be as important as the beginning. The use of the phrase "for such installation" implies that BACT is used as a control technology after selection of the process to be so controlled. In BACT guidance issued by EPA it states that, "Historically, EPA has not considered the BACT requirement as a means to redefine the design of the source…" It goes on to mention that applicants proposing to install a coal-fired electric generator have not been required to consider a natural gas fired turbine as a part of the BACT selection process. (See the New Source Review Workshop Manual, draft October 1990, page B.13)

The situation suggested by the commenter is not so different. The source looked at electricity production and settled on the use of coal for use as the fuel based on the lower cost of using coal. Similarly the source evaluated different methods of electricity production using coal and settled on a circulating fluidized bed (CFB) boiler design as their choice. This choice included efficiency, emissions, reliability, and both initial and ongoing operating costs. IGCC was one of these production methods investigated.

The source made its decision to select a CFB boiler. The source then submitted their NOI with a BACT selection process based around this production choice. UDAQ evaluated the BACT decision in the same manner. At this time UDAQ does not consider the application of IGCC to the choice of a CFB boiler to be part of the BACT selection process. To do so would be similar to requiring a source to look at a natural gas turbine instead of a coal-fired boiler - something clearly not intended by EPA. UDAQ would not require a source to consider electric battery powered trucks to be BACT for a source needing heavy-duty, diesel-fired trucks. The process chosen by the source needs to be made based on the requirements of the source and the site selected for its installation. Control techniques are then applied to reduce the emissions of that process.

The control techniques chosen by the source; specifically low-NO_x burners, combustion controls, limestone injection, dry scrubber and a baghouse; have been evaluated by UDAQ and are felt to represent BACT. They are representative of similar power plant designs around the country, including those receiving new permits within recent months.

85. "UDAQ and NEVCO should have evaluated the use of K-Fuels"

UDAQ response:

The comment refers to a fuel known as 'K-Fuel', which is coal treated in a pre-combustion process to increase the quality of the coal and potentially remove some of the pollutant precursors from the raw fuel. The commenter mentions within the body of the comment two items, which would immediately remove the fuel from consideration. The first of these is the general lack of availability. The first production plant is being built, so a source of

these K-fuels is not currently commercially available. Requiring a source to evaluate the use of a fuel, which is not available for use, is somewhat ludicrous. The second item is that we have only vague marketing claims for the emission reductions possible with the use of this fuel. UDAQ can find no information that this claim has been proven in practice, and therefore will not require the source to use an untested fuel source.

86. "UDAQ did not consider the mercury MACT standard proposed by EPA."

UDAQ response:

This comment addresses the January 30, 2004 proposed EPA mercury MACT standard, and the unfortunate typographical error within the ITA for a mercury limitation. The typographical error has already been corrected (see response to comment #78). UDAQ did consider the proposed EPA MACT standard. In fact, the emissions anticipated at the SPC site are less than this proposal; showing a greater anticipated level of control than listed in that document. UDAQ apologizes for any confusion that this typographical error caused.

87. "UDAQ failed to meet the case-by-case MACT requirements for other HAPs."

UDAQ response:

This comment refers to the apparent lack of enforceable limitations for other HAP emissions outside of mercury. This comment is similar to comment #100. UDAQ agrees that the use of the term 'BACT Design Rate' is in fact inappropriate and that an emission limitation needs to be included. The language for condition #10 of the AO has been updated to reflect this. Please see UDAQ's response to comment #100 for more details.

88. "The ITA must contain emission limits reflective of BACT or MACT for all regulated pollutants."

UDAQ response:

The commenter wishes emission limits be set for VOCs, PM, greenhouse gas emissions, and an enforceable opacity limitation. UDAQ agrees that an emission limit needs to be set for total PM. Greenhouse gas emissions are addressed in UDAQ's response to comment #83. The source is minor for VOC emissions and no control techniques aside from combustions controls and tuning are being proposed, UDAQ does not feel that value would be added to the final AO in adding an emission limit for uncontrolled minor emissions of VOCs. An enforceable opacity limitation will be set (see also response to comment #45). The limits in question (PM and opacity) are outlined as follows:

PM/PM_{10}	39.0 (0.0154 lb/MMBtu)	24-hour rolling

Visible emissions from any stationary point shall not exceed 10% opacity.

Both limits have associated compliance and monitoring clauses included. For PM compliance will be verified by a yearly stack test. Opacity will be monitored with Method 9 observations.

89. "The modeling analysis shows the SPC project will contribute to existing PM_{10} NAAQS violations."

UDAQ response:

Please see UDAQ's response to comment #13.

90. "UDAQ failed to include condensable PM_{10} emissions in determining the SPC's project's PM_{10} impacts."

UDAQ response:

While the initial modeling exercise did not appear to take the condensable portion of the PM_{10} emissions into account, further communications with the source have clarified this. The modeled and enforceable limit for PM_{10} includes both the filterable and condensable PM_{10} fractions. Similarly, the enforceable limit in the ITA for PM_{10} included both fractions, and EPA reference method 202 will be used to account for the condensable fraction for compliance purposes. This will be clarified in the final AO.

91. "The Division did not adequately justify use of the second highest monitored PM_{10} concentration as a background value."

UDAQ response:

Please see UDAQ's response to comment #55 for an explanation.

92. "Any source curtailments or shutdowns must be made permanent and federally enforceable."

UDAQ response:

This comment refers to the fact that one of the two gypsum plants in the area near the proposed SPC project is currently not in operation. The question of whether the gypsum plants are or are not in operation is not important for purposes of this AO. SPC modeled impacts including both plants in operation according to the limitations imposed by those two sources' AOs. Additional information on this can be found in UDAQ's response to comment #13. As no technical issues were raised with respect to this Intent to Approve, no changes were made to the Approval Order.

93. "The Class II PM_{10} increment analysis is not complete."

UDAQ response:

This comment is specifically referring to the apparent lack of the condensable PM_{10} fraction in the modeling exercise. This comment has been addressed in UDAQ's response to comment #90.

94. "NEVCO failed to provide an analysis of SPC project's impacts to soils and vegetation."

UDAQ response:

This comment addresses both the lack of qualification of the modeling team, which is similar in nature to comment #17, and the lack of growth in the area, which is similar to comments #15 and 57. Please see UDAQ's response to comments # 15, 17, 43 and 57 for further information.

95. "The Class I analysis for the SPC project is flawed."

UDAQ response:

This comment refers to the use of only one year of meso-scale meteorological data, and the use of Class I Significant Impact Levels (SILs) for the Class I modeling analysis. In addition, the commenter is asking for a cumulative Class I increment analysis that includes the maximum emission rates for all sources. Please see UDAQ's response to comments #5, 8 and 9 for details on the meso-scale meteorological data.

The UDAQ has adopted as policy, the use of significant impact levels (SILs) in the air quality analysis process. The use of SILs in regulatory analysis is endorsed by the EPA – Region VIII Modeler and the National Park Service Air Quality Modeler in Denver. If the sources impact is less than the SIL (equal to approximately 4% of the standard), the UDAQ feels that there is not technical grounds for a cumulative effects analysis.

96. "Statement that IGCC is too costly should be quantified."

UDAQ response:

Please see UDAQ's response to comment #84.

97. "Condesibles [sic] should be included in demonstration of compliance with the PM_{10} emission limit, as well as in ambient impact analysis, and should be tested by Method 202.

UDAQ response:

Please see UDAQ's response to comment #90.

98. "BACT emission limits for PM_{10} and CO should be in lb/MMBtu, not just lb/hr."

UDAQ response:

UDAQ agrees with this comment and appropriate changes have been made to condition #10 of the AO. Please see the response to comment #88 for details.

99. "Testing for compliance with rolling 24-hr emission limits for PM_{10} should be required for the entire 24 hours."

UDAQ response:

UDAQ agrees with this comment. A change to condition #10 of the AO has been made to reflect this.

PM/PM10	39.0 (0.0154 lb/MMBtu)	24-hour rolling*

* Based on a 24-hour test run or any method approved by the Executive Secretary, which will provide 24-hour data

100. "The case-specific MACT determination for mercury should be expressed as an emission limit rather than design rate, should be expressed on an output rather than input basis, and a typographical error in the stringency of the determination should be corrected."

UDAQ response.

UDAQ agrees that the mercury limitation given in the AO should be expressed as an emission limit and that the typographical error needed to be corrected (see response to comment #78 for details). However, given the nature by which UDAQ wishes the source to monitor compliance with the mercury limitation, specifically the use of fuel monitoring and potential testing with the use of Method 29, expression of this limit on an output rather than input basis would unnecessarily complicate verification of compliance.

Additionally, the source is required to use only fuels (coal) with given mercury contents (or lower) unless demonstration of compliance with the mercury emission limitation can be verified. Mercury control is achieved through incidental capture in the fabric filter (baghouse) and use of lower mercury containing fuels; however, the efficiency of the baghouse control is not required or set by permit condition. Setting an emission limitation on an output basis would, in effect, allow the source to use the highest mercury containing fuel available that would meet the emission limitation. This is no different than what is allowed to them under this permit condition; except that the source must demonstrate compliance with each new mercury quality fuel, which they test on their way to this theoretical highest value. Not only does this generate additional reference test points for each fuel mercury quality, it also allows the source and UDAQ to see the effect of other fuel constituents on mercury emissions.

101. "Total increment consumption should be mentioned in the State's engineering analysis, not just incremental consumption by NEVCO alone.

UDAQ response:

Please see UDAQ's response to comments #5, 8 and 9. The UDAQ feels that since the impacts from the proposed project are below the SILs, a cumulative analysis is not warranted. Hence, there would be no requirement to report the results of any cumulative analysis in its finding.

102. "Potentially overlapping ambient impacts of multiple pending energy projects should be considered."

UDAQ response:

Please see UDAQ's response to comments #19 and 101.

103. "NEVCO should evaluate the possibility of achieving a lower NO_x emission rate by applying SCR or by improving the efficiency of its chosen control technology."

UDAQ response:

In the NPS letter dated November 4, 2003, the reviewer wanted a discussion on the technical feasibility of SCR for CFB boilers. According to the SPC Project plant designers, SCR for NO_x control is not required due to the inherently low thermal NO_x formation in a CFB boiler due to the low combustion temperature. A SCR will greatly increase the cost of the plant, increase operation and maintenance cost, emit ammonia, and will generate a long-term disposable SCR waste catalyst product.

Using SNCR, it is possible to achieve lower NO_x emissions (<0.10 lb/mmBtu) but the fuel bound O_2 will play a factor in the generation of NO_x as will the design of the CFB boiler. Therefore the specific emission values that will result are not known, until after the source is constructed and burning fuel. The use of a SNCR and the type of fuel are interrelated and empirically determined to the degree of NO_x emissions produced. At this point, the SPC Project is not pursuing a lower limit simply based on the possibility that, during the plant emissions performance tests, a lower value might be achieved. Rather, they have suggested a limit which is known to be achievable, and for which they can receive a guarantee. UDAQ agrees with this practice and has established this emission limitation as representing BACT in this case.

104. "NEVCO should evaluate the possibility of achieving a lower PM_{10} emission rate by improving the efficiency of its chosen control technology."

UDAQ response:

The PM_{10} emission rate of 0.015 lb/mmBtu being imposed is a combined filterable and condensable emission rate. This value was based on a the use of a fabric filter (baghouse) as a means of controlling particulate, which is one of the most effective particulate systems available for power plants. The Northampton Generating Company in Pennsylvania has stated an emission limit in the RACT/BACT/LAER clearinghouse of 0.010 lb/mmBtu for PM_{10} using fabric filters. This source burns a combination of anthracite waste coal and petroleum coke, in a 110 MW CFB boiler. This plant is vastly different from the SPC plant, both in size and fuel type, so a direct one-to-one comparison is not appropriate. However, the SPC project has proposed the same fabric filter control technology that is being used at Northampton Generating Company; hence, lower particulate emissions may be achievable once the plant becomes operational and source testing has been conducted. At this time, SPC feels that they have the best control technology for limiting PM_{10} emissions.

105. "UDAQ should require installation and operation of a PM_{10} CEM."

UDAQ response:

Given the control device chosen to capture PM_{10} prior to emission (fabric filtration), and the relatively small amount of PM_{10} emissions from a source of this type (177.4 tons per year), the requirement to install a CEM to monitor emissions seems overly stringent. The purpose of a monitoring methodology, be it periodic stack testing, opacity observations, portable monitoring, or the use of a CEM, is to verify that emissions are as estimated and to ensure that the control devices are functioning as anticipated.

In this case, the source is a base load power plant with very consistent heat input rates and a consistent coal quality as part of its design. Fabric filtration, the particulate matter control methodology, is very constant in overall filtering efficiency regardless of particulate loading. Emissions of particulate matter into the atmosphere after passing through the control device are not expected to vary much or have a wide range of fluctuation. Requiring a source to install an expensive monitoring system to verify that the baghouse is operating correctly is overkill. Bag leak detectors, pressure measurement devices, and periodic opacity observations accomplish the same task without installing expensive and complicated equipment; equipment that would then be subject to additional rules and regulations, and would also have additional compliance requirements. UDAQ feels that the periodic stack testing required in condition #10 of the AO, and the observation requirements of conditions #7, 8 and 12, is sufficient to satisfy monitoring.

106. "NEVCO/UDAQ should explain how the cumulative source inventory was compiled and demonstrate that it is protective of applicable increments."

UDAQ response:

For information on how the cumulative source inventory was compiled, please see UDAQ's response to comments # 19, 37, 58, and 95. With respect to the commenter request that SPC/UDAQ demonstrate that it is protective of applicable increments, the UDAQ feels that the SPC analysis is consistent with Federal regulation. See 40CFR 51.166(b)(21)(ii), actual emissions. "In general emissions…shall equal the average rate, in tons per year at which the unit actually emitted pollutant…Actual emissions shall be calculated using the unit's actual operating hours, production rates…" Actual emissions were used for included sources in all increment analyses performed by the applicant.

107. One commenter included a photograph of a mounted sign placed at an overlook in Capitol Reef National Park, along with a request that the Division read it. The commenter also wanted to know if the Division was going to preserve air quality

UDAQ response:

The comment was read and noted. UDAQ works to preserve air quality through the application of BACT, establishing emission limitations on stationary sources, and setting required controls for the minimization of fugitive dust, among other programs. As no

technical issues were raised with respect to the Intent to Approve, no changes were made to the Approval Order.

108. The application submitted by NEVCO did not address air contaminants or air pollution.

UDAQ response:

While it is unclear to exactly what the commenter is referring, UDAQ assumes that the commenter is referring to the proposed emissions of HAPs as outlined in the ITA, and to quality of life issues arising from those emissions. Please see UDAQ's response to comment #60 for details.

109. "The ruling by the 10th Circuit Court of Appeals in Denver on the Monroe Mountain Ecosystem Restoration Project could be applied to the Sevier Power Company project."

UDAQ response:

UDAQ is not aware of this ruling's relevance to the proposed SPC project. A review of the decision seems to indicate that the commenters wish SPC to perform a more detailed analysis of the possible impact on soils, vegetation and wildlife, as required under R307-405-6(2)(D). This is addressed in UDAQ's response to comment #43.

110. UDAQ received a supplemental comment letter, which included two court documents. The first was a copy of the Joint Stipulation of Dismissal in Dakota Resource Council v. EPA, Civil Action No. 04-1994 (8th Cir.). The second was a copy of Petitioners' Appellate Brief in Commonwealth of Massachusetts v. EPA, Civil Action No. 03-1361 (D.C. Cir.).

UDAQ response:

These comments were received after the closing of the second comment period, specifically on July 16, 2004, and therefore did not need to be considered by UDAQ when reviewing comments prior to issuing the final AO. UDAQ did read the two documents, but did not find a comment on the proposed permit for SPC. Referencing the cover letter, it appears that these two documents are to be included as supporting documentation for comments #13, 82, 83, 89 and 95. Please see UDAQ's response to those comments for details.